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Application Serial No. 10/540,642

Attorney Docket No. PF030011

Please amend the paragraph beginning on page 4, line 18, as follows:

As shown in Figure 1, the base of the rib 6, at the junction with the microstrip line 7, is at a distance E from the ground plane of the microstrip line, ~~this~~ This distance E corresponding to the thickness of the substrate at the junction with the ribbed waveguide.

Please amend the paragraph beginning on page 4, line 25, as follows:

The rib 6 is ~~centred~~ centered in the width of the foam bar and its dimensions can be adjusted according to the operating frequency range required by ensuring an adequate gradual passage from the quasi-TEM propagation mode of the microstrip line to the fundamental mode of the guide. Such a gradual passage is obtained according to a given profile, linear, exponential or other. In general, the minimum length of the profile obtained to ensure correct matching over the entire operating range must be in the order of a fraction of the wavelength (for example, a quarter of the wavelength) corresponding to the lowest frequency.

Please amend the paragraph beginning on page 5, line ~~23~~²², as follows:

AB
3/11/08
10/540,642

Figures 2 to 4 illustrate a method of producing the transition according to the invention in foam technology. A foam bar 20 is previously given a rectangular form in a transversal cross-section with dimensions that correspond to the inner dimensions of a rectangular waveguide for an operation that is theoretically monomodal in the frequency range required. Then, the foam bar is worked by machining, thermoforming, stamping or other methods to form the rib 6, as shown in Figure 3. The operation of delimiting the rib 6 in the section of the waveguide G can be prolonged at the level of the section of the microstrip line 7, as shown in Figure 3. The foam block 20 can then be fully metallized, the metallization of the rib and the formation of the microstrip line being obtained simultaneously. A non-directive metallization by projection or brush can be used. Then, the foam block is cut transversally at the extremity of the rib 6 to obtain the substrate 5 (see Figure 4) in plate shape of the microstrip line.